Wind farms in the Cambrian Mountains: where do we stand?

What wind farms are we talking about here?

Developers are currently proposing 5 huge wind farms to be built in different places in the Cambrian Mountains: three in Ceredigion, two in Powys. These new proposals are very different from the wind farms we've already got. The turbines at Cefn Croes in the Elenydd have towers 65m high and turbines 70m in diameter, so the maximum tip height is only 100m.

Renaker's proposed 70-story Lighthouse building will be downtown Manchester's tallest… but shorter than Bryn Cadwgan's turbines!

These days, since more wind farms have been built offshore for the greater wind speeds and consistency, wind turbine manufacturers are *only* making offshore-sized turbines. That's turbine blades reaching between 180- 230m into the air *above* the tops of the hills. What sort of things around here are 230m high? You may well ask: Wales' tallest building, the Tower on Meridian Quay in Sweansea, is just 107m high.

You'd be able to see three of these huge hill top farms from Aberystwyth, across Ceredigion's gently rolling countryside.

The proposals

Lluest y Gwynt

Lluest y Gwynt, backed by Norwegian investors, plan to build 13 turbines to heights of 180m on the western shoulder of Plynlimon Fawr. Their website says that they envisage starting construction of turbines in summer 2024, but they have not yet filed their formal planning application. Nevertheless, this proposal has been progressing slowly for some time and the application is likely very soon. Website: https://lygwindfarm.co.uk/home-e/

Waun Maenllwyd

A proposal by Belltown Energy, backed by Guernsey-based private equity, for 6 turbines at a height of 230m, 13km north-east of Lampeter, 3.5km south-east of Llandewi-Brefi. They are aiming to submit an application for planning permission in March 2024. Details at: https://www.waunmaenllwyd.com/en

Bryn Cadwgan

A proposal for up to 25 turbines with a height of 230m, situated near Llyn Brianne on the Carmarthenshire/ Ceredigion border, south of Llanddewi Brefi above Ffarmers. The

developer is Galileo Energy, a Swiss company backed by Australian and New Zealand investment funds (including the Australian Army's pension fund). They held consultations in autumn 2023, and aim to submit a full planning application by late 2024. Details on their website: https://bryncadwganenergypark.co.uk/en/

Banc Du and Rhiwlas

Two proposals by Bute Energy, who are ultimately owned by a mix of UK and offshore investors, for windfarms to the north-west and south-east of Llangurig. Banc Du will be 7 200m high turbines, and at Rhiwlas 15 more 200m high turbines. They propose to carry out statutory consultation in spring 2024, and file planning applications in summer 2024.
Details are available at: https://rhiwlasenergypark.wales/
https://bancduenergypark.wales/

STOP PRESS: *Esgair Galed*

A new proposal, just announced by Bute Energy, for 26 220m high turbines above Dylife and around the Glaslyn Nature Reserve. The project is expected to go into statutory consultations in the summer of 2024. See: https://esgairgaledenergypark.wales/

Who's it for?

Don't be fooled by the Welsh names; each of these proposals is backed by foreign investors, aiming to profit from the generous government subsidies for generating wind energy in the UK. Wales already generates as much wind power as the existing power infrastructure lets it consume. Most of any energy generated by these new schemes will be exported.

It's not just the turbines

The Cambrian Mountains' exceptional peace and remoteness comes from their lack of major infrastructure: no major roads except the A44; no pylon chains striding across the hills. In order to construct these wind farms, it will be necessary to widen roads, build some new tracks and create construction sites. If the farms go up, they'll need connecting to the National Grid, and since developers always grumble that laying underground cable is too expensive, the most likely way to do this is to construct long pylon chains like the 60km currently being proposed to run through the Towy Valley in Powys and Carmarthenshire. Although much smaller than the turbines themselves, the pylons will turn the open landscapes they cross into industrialised spaces, where the heavy hand of humanity is obvious in every direction.

Construction of both will cause carbon emissions, both from the activities themselves and from the release of carbon in the soils and peats dug up for the purpose. These releases are not included in most lifetime carbon analysis for wind power, because for most projects elsewhere, the infrastructure is already there. They will also have a huge impact on the precious and fragile biodiversity of these relatively remote and wild places.

The right turbine in the right place

Developers, and the investors behind them, would have us believe that this devastation of our environment is necessary in order to fight climate change. But it is not so simple. Offshore wind has been dominant in recent years because the wind really is more favourable out at sea: average wind speeds are faster, flow is more laminar because there are no hills and valleys. All Wales' wind power needs could be met by building more turbines offshore. Questions of cost (that is, how much profit the developers should be entitled to expect) and subsidies are what's bringing them onshore.

